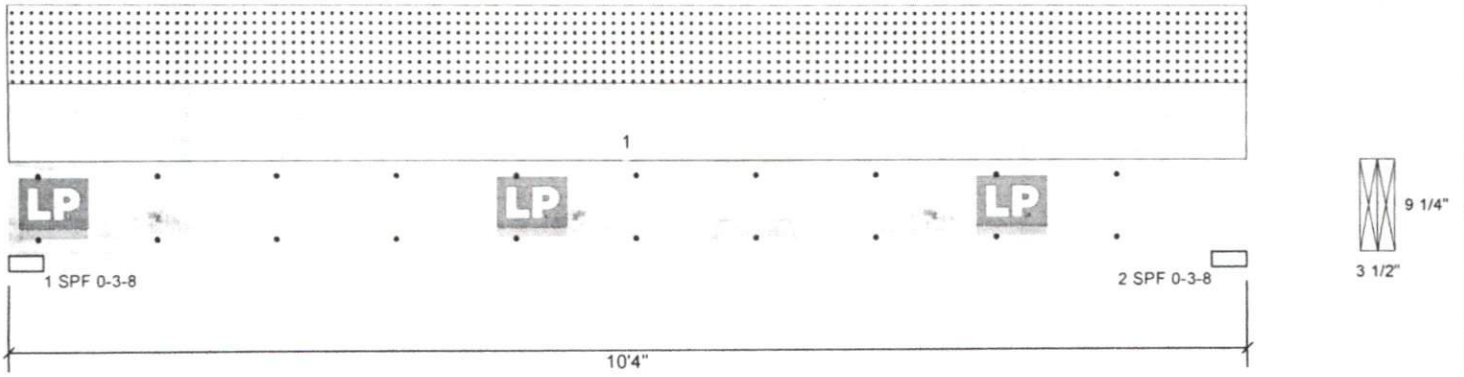
isDesign

Client: Front Porch Building Company
Project:
Address:

Date: 4/9/2025
Input by:
Job Name: Screen Porch
Project #:

# B2 LP-LVL 2900Fb-2.0E 1.750" X 9.250" 2-Ply - PASSED

Level: Level




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal - II | | |
| Temperature: | Temp <= 100°F | | |

## Reactions PATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|---|---|---|---|---|---|---|
| 1 | Vertical | 0 | 1185 | 1137 | 0 | 0 |
| 2 | Vertical | 0 | 1185 | 1137 | 0 | 0 |

## Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|---|
| 1 - SPF | 3.500" | Vert | 45% | 1185 / 1137 | 2321 | L | D+S |
| 2 - SPF | 3.500" | Vert | 45% | 1185 / 1137 | 2321 | L | D+S |

## Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---|---|---|---|---|---|---|
| Moment | 5476 ft-lb | 5'2" | 14278 ft-lb | 38% | D+S | L |
| Shear | 1844 lb | 9'3 1/4" | 7074 lb | 26% | D+S | L |
| LL Defl inch | 0.111 (L/1063) | 5'2" | 0.247 (L/480) | 45% | S | L |
| TL Defl inch | 0.228 (L/520) | 5'2" | 0.329 (L/360) | 69% | D+S | L |


## Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings.
2 Dead Load Deflection: Instant = 0.116", Long Term = 0.174".
3 Fasten all plies using 2 rows of 12d Box nails (.128x3.25") at 12" o.c. Maximum end distance not to exceed 6". Clinch Nails where possible.
4 Refer to last page of calculations for fasteners required for specified loads.
5 Girders are designed to be supported on the bottom edge only.
6 Top loads must be supported equally by all plies.
7 Top must be laterally braced at end bearings.
8 Bottom must be laterally braced at end bearings.

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Uniform | | 11-0-0 | Top | 20 PSF | 0 PSF | 20 PSF | 0 PSF | 0 PSF | |
| | Self Weight | | | | 9 PLF | | | | | |

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.



This design is valid until 11/16/2026

**Manufacturer Info**

Louisiana-Pacific Corp
414 Union Street, Suite 2000
Nashville, TN 37219
(888) 820-0325
www.lpcorp.com
APA PR-L280, ICC-ES ESR-2403, LADBS RR-25783, Florida FL15228

166 Putnam Street
Fuquay- Varina



CSD DESIGN BUILD

iStruct Design

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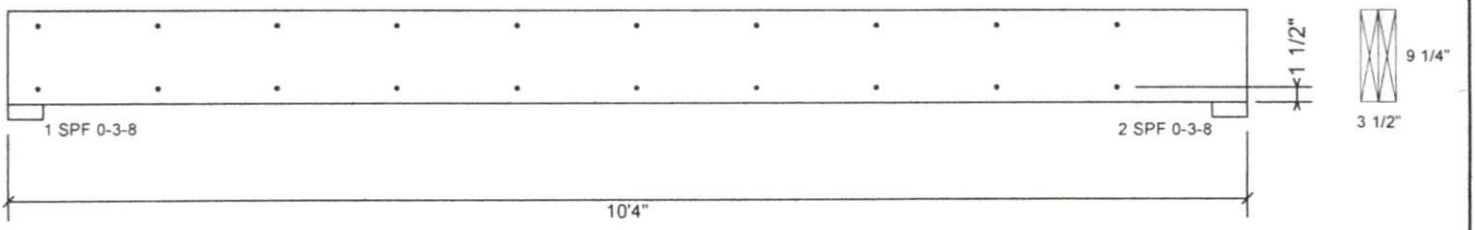


### Multi-Ply Analysis

Fasten all plies using 2 rows of 12d Box nails (.128x3.25") at 12" o.c.. Maximum end distance not to exceed 6". Clinch Nails where possible.

| | |
|---|---|
| Capacity | 0.0 % |
| Load | 0.0 PLF |
| Yield Limit per Foot | 185.4 PLF |
| Yield Limit per Fastener | 92.7 lb. |
| Cm | 1 |
| Yield Mode | IV |
| Edge Distance | 1 1/2" |
| Min. End Distance | 3" |
| Load Combination | |
| Duration Factor | 1.00 |

**Notes**

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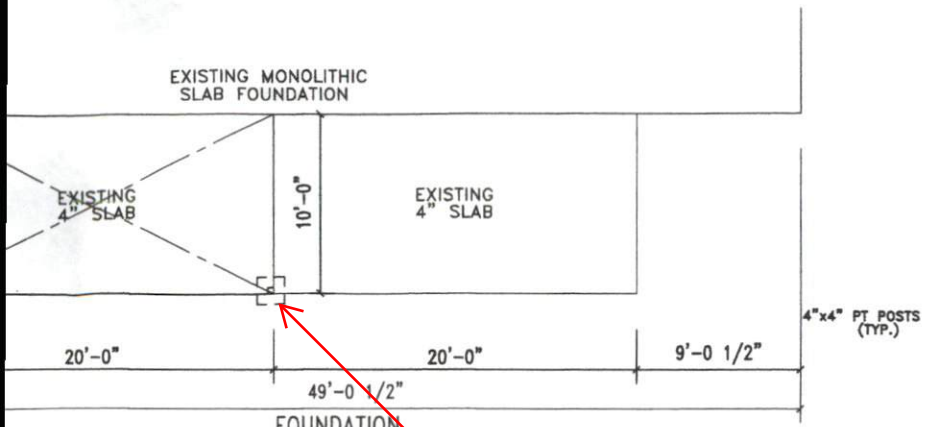
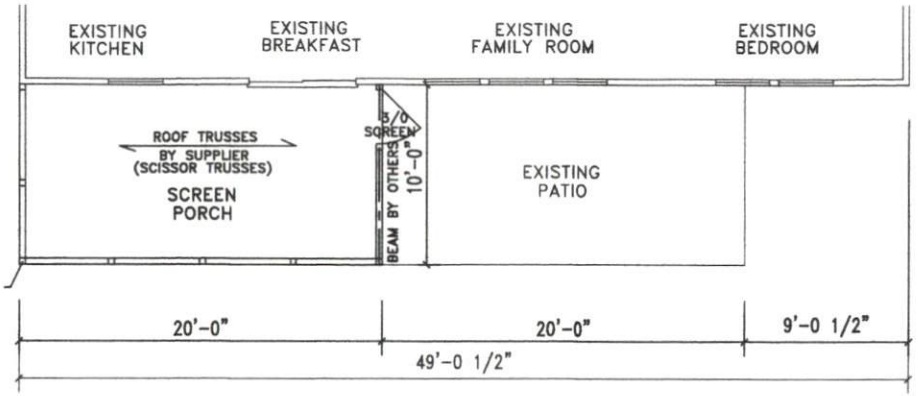
CSD DRAW DESIGN BUILD

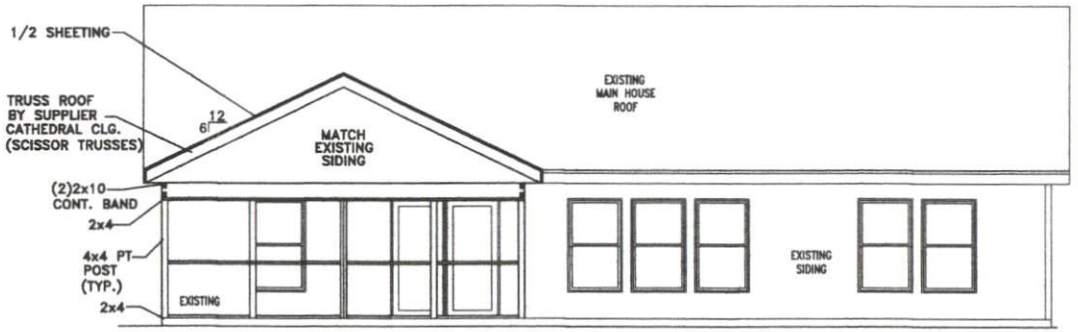



FOUNDATION
SCALE:.....1/8"=1'

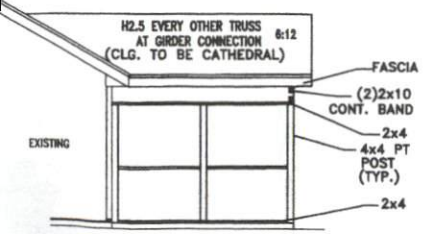



FLOOR PLAN DETAIL
SCALE:.....1/8"=1'

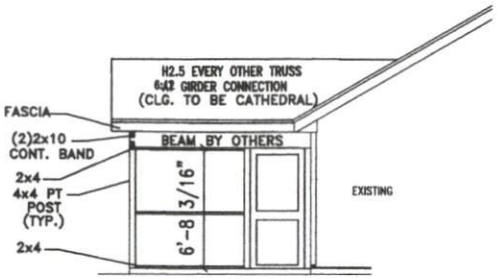
Provide footings
under all load bearing
posts




FRONT ELEVATION DETAIL
SCALE:.....1/8"=1'




SIDE ELEVATION DETAIL
SCALE:.....1/8"=1'




SIDE ELEVATION DETAIL
SCALE:.....1/8"=1'

REVISIONS:

FRONT PORCH
BUILDING COMPANY
919-291-7877

166 Putnam Street
Fuquay-Varina

10x20 Slab
Screen Porch

FILE
DESIGN ADS
DRAWN ADS
CHECKED
DATE 04/06/2025
SHEET 1